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ABSTRACT:

PURPOSE: To provide a plastic container body which can be easily taken out from stacked container main bodies one by one, and does not generate problems at the time of forming.

CONSTITUTION: A container main body 2, which is solid phase pressure-formed, is equipped with a container body part 11, container bottom part 12, and a flange part 13 which provided at the upper end opening peripheral edge of the container body part 11. A plurality of stack parts 10 are provided on the container body part 11 in the peripheral direction, and the stack part 10 is equipped with a stack descending part 14 and stack horizontal part 15.

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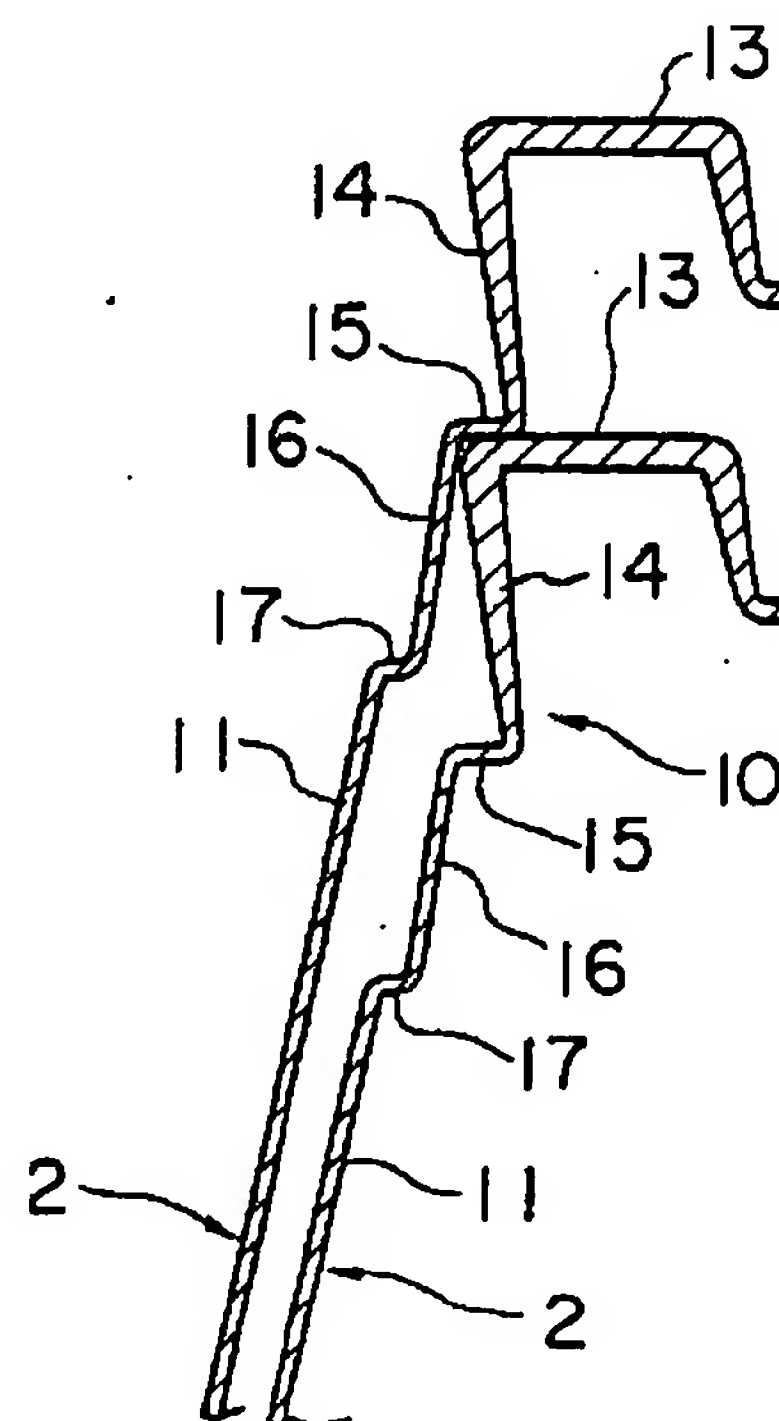
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(54)【発明の名称】 包装容器

(57)【要約】

【目的】 スタックされた容器本体から1つ1つの容器本体を容易に取出すことができ、成形時の問題を生じさせないプラスチック製容器本体を提供する。

【構成】 固相圧空成形された容器本体2は容器胴部11および容器底部12と、容器胴部11の上端開口周縁に設けられたフランジ部13とを備えている。容器胴部11の周方向に複数のスタック部10が設けられ、スタック部10はスタック下降部14と、スタック水平部15とを有している。



【特許請求の範囲】

【請求項1】容器胴部および容器底部と、容器胴部の上端開口周縁に設けられたフランジ部とを備え、ポリオレフィン樹脂シートをその融点により低い温度で熱成形してなる包装容器において、前記容器胴部の周方向に複数のスタック部を設け、このスタック部は前記フランジ部から下方外方へ延びるスタック下降部と、このスタック下降部下端から水平方向内方へ延びるスタック水平部とを有し、容器本体をスタックした場合に下方に位置する容器本体のフランジ部が上方に位置する容器本体のスタック水平部を支持することを特徴とする包装容器。

【発明の詳細な説明】

【0001】

【産業上の利用分野】本発明は内部に果実、ゼリー液等の食品が充填される包装容器であって、ポリオレフィン樹脂シートを融点より低い温度において熱成形してなる包装容器に関する。

【0002】

【従来の技術】従来より、プラスチック製包装容器内に果実、ゼリー液等を充填し、この包装容器を蓋材で密閉したものが知られている。

【0003】このうち、プラスチック製包装容器は容器底部および容器胴部と、この容器胴部の上端開口に設けられたフランジ部とを有しており、包装容器はプラスチック製積層体を熱成形して作成される。一方、蓋材は包装容器のフランジ部にヒートシールされるようになっている。

【0004】すなわち、蓋材は包装容器のフランジ部にヒートシールされるヒートシール部と、このヒートシール部に連設されるとともに下方に落ち込む落とし蓋部とからなっており、落とし蓋部は包装容器の開口を覆うようになっている。

【0005】包装容器は、上述のように容器底部および容器胴部と、フランジ部とを有しており、果実、ゼリー液等が充填される前は、複数積み重ねられて（スタックされて）蓄えられる。包装容器のスタック状態を図6に示す。

【0006】図6に示すように複数の包装容器2をスタックすると、上方の包装容器2はその容器胴部11の外表面11aを下方の包装容器2の容器胴部11の内面11bに当接させた状態で下方の包装容器によって支持される。

【0007】

【発明が解決しようとする課題】上述のように、複数の包装容器2は上方の包装容器2の容器胴部11の外表面11aが下方の包装容器2の容器胴部11の内面11bに当接してスタックされる。しかしながら、このスタックされた包装容器2から包装容器2を取出す際、容器胴部11同志の摩擦により1つ1つ取出すことが困難となる場合があり、通常スタック部を設けるスタック方法には

2種類あり、1つはスタック部リブ11C（図6参照）を設ける方法と、スタック部を逆テーパにして、アンダーカット形状にする方法がある。

【0008】スタック部リブ11Cを設ける方法では容器形状によっては大きくなり、摩擦によるピンホール不良が起こる場合があり、またスタックピッチ（容器スタック間隔）が広くなり容器梱包時カートンが大きくなる問題がある。他方スタック部をアンダーカット形状とする方法では、スタックピッチが狭く、梱包時カートンが小さく設定できるが、成形性が甘いと容器重なり合い、取出し不能になることがある。特に、アンダーカット形状では、固相圧空成形のような低温成形の時は成形性に問題がある。

【0009】本発明はこのような点を考慮してなされたものであり、スタックされた包装容器から1つ1つ容易に取出すことができるプラスチック製包装容器を提供することを目的とする。

【0010】

【課題を解決するための手段】本発明は、容器胴部および容器底部と、容器胴部の上端開口周縁に設けられたフランジ部とを備え、ポリオレフィン樹脂シートをその融点より低い温度で熱成形してなるプラスチック製包装容器において、前記容器胴部の周方向に複数のスタック部を設け、このスタック部は前記フランジ部から下方外方へ延びるスタック下降部と、このスタック下降部下端から水平方向内方へ延びるスタック水平部とを有し、包装容器をスタックした場合に下方に位置する包装容器のフランジ部が上方に位置する包装容器のスタック水平部を支持することを特徴とする包装容器である。

【0011】

【作用】複数の包装容器をスタックした場合、上方に位置する包装容器スタック水平部を、下方に位置する包装容器のフランジ部で支持することができる。

【0012】

【実施例】以下、図面を参照して本発明の実施例について説明する。

【0013】図1乃至図4は、本発明による包装容器の一実施例を示す図である。まず、図4によりプラスチック製包装容器2とプラスチック製蓋材3の全体について簡単に説明する。図4に示すように、包装容器2内に固形物の果実4とゼリー液5が充填され、この包装容器2が蓋材3で密閉されている。

【0014】包装容器2は容器胴部11および容器底部12と、容器胴部11の上端開口周縁に設けられたフランジ部13とを備えている。

【0015】一方、蓋材3は包装容器2のフランジ部13にヒートシールされる（融着される）ヒートシール部3bと、このヒートシール部3bの内側に設けられた落とし蓋部3aとからなっている。落とし蓋部3aは容器胴部11を覆うものであり、第1段部7および第2段部8を

介してヒートシール部3bに連設されている。このうち第2段部8は包装容器2の内面に嵌り混む部分である。

【0016】次に包装容器2について図1乃至図3により、以下詳述する。

【0017】包装容器2の容器胴部11には、周方向に複数のスタック部10が設けられている。スタック部10は、図1に示すように、平面が四角形状の包装容器2の容器胴部11に、例えば周方向に8個設けられている。このスタック部10は複数の包装容器2を積み重ねた場合（スタックした場合）に、上方の包装容器2を下方の包装容器2が支持する部分である。

【0018】すなわち、スタック部10は、図2に示すようにフランジ部13から下方外方へ延びるスタック下降部14と、スタック下降部14の下端から水平方向内方へ延びるスタック水平部15とを有している。スタック水平部15には、さらに下方内方へ延びる中間下降部16と、中間下降部16から水平方向内方へ延びる中間水平部17とが順次連設されている。そして、複数の包装容器2をスタックした場合、上方の包装容器2のスタック水平部15を下方の包装容器のフランジ部13が支持するようになっている。

【0019】スタック部10以外の容器胴部11について、図3により説明する。図3に示すように、フランジ部13から下方内方へ延びる容器下降部19が設けられ、下降部19の下端には水平方向内方へ延びる容器水平部20が設けられている。このうち、容器水平部20は中間水平部17に対応する位置に、同一形状で設けられており、また容器下降部19は中間下降部16と同一の傾きを有している。

【0020】次に上記各構成部材の材質について説明する。

【0021】包装容器2は、例えばポリプロピレン（PP）／接着層（AD）／エチレン・ビニルアルコール共重合体（EVOH）／接着層（AD）／ポリプロピレン（PP）の積層体シートをその触点より低い温度で固相圧空成形して作成され、透明容器となっている。

【0022】一方、蓋材3は例えばPP／AD／EVOH／AD／シーラント層のガスバリア性の積層体からなっている。この蓋材3はシーラント層を包装容器2のフランジ部13側に向けてヒートシールされるようになっている。

【0023】以上説明したように、本実施例によれば、複数の包装容器2をスタックした場合に、上方に位置する包装容器2のスタック水平部15を下方に位置する包装容器2のフランジ部13で支持することができる。このため、包装容器2をスタックした場合に、下方の包装容器2の容器胴部11内に上方の包装容器2の容器胴部11が嵌り込むことはない、スタックされた包装容

器2から1つ1つの包装容器2を容易に取出すことができる。また固相圧空成形において、成形性の要求されるスタック部および逆テーパ部が少ない為、圧空が有効に働き、スタック部の成形性の向上が見られる。

【0024】なおスタック部10のスタック下降部14は、下方外方へ延びる逆テーパ状となっているため、成形後成型金型から取出す場合に支障が生じることも考えられるが、スタック部10は容器胴部11のうち所定箇所のみ設けられているので、全周にスタック部10を形成した場合に比較して成型金型から取出す時の負担を小さく押さえることができる。

【0025】なお、上記実施例において平面が四角形状の包装容器2の例を示したが（図1）、図5に示すようにこれに限らず包装容器2は平面が円形状となってもよい。

【0026】

【発明の効果】以上説明したように、本発明によれば、成形性の難しい固相圧空成形品でも複数の包装容器をスタックした場合に、下方の包装容器の容器胴部内に上方の包装容器の容器胴部が嵌り込むことはない、スタックされた包装容器から1つ1つの包装容器を容器に取出すことができる。またスタック部は容器胴部のうち、所定箇所のみ設けられているので、スタック下降部が逆テーパ状になっていても、容器胴部の全周に設けた場合に比較して成型金型から包装容器を取出す時の問題を小さく押さえることができる。

【図面の簡単な説明】

【図1】本発明によるプラスチック製包装容器の一実施例を示す平面図。

【図2】複数の包装容器をスタックした状態を示すスタック部の側断面図。

【図3】複数の包装容器をスタックした状態を示すスタック部以外の容器胴部の側断面図。

【図4】包装容器とこれを密封する蓋材の全体を示す側断面図。

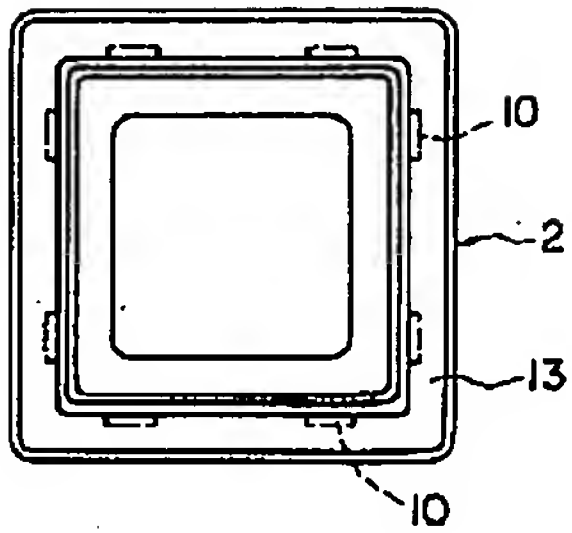
【図5】プラスチック製包装容器の他の実施例を示す平面図。

【図6】従来の包装容器をスタックした状態を示す側断面図。

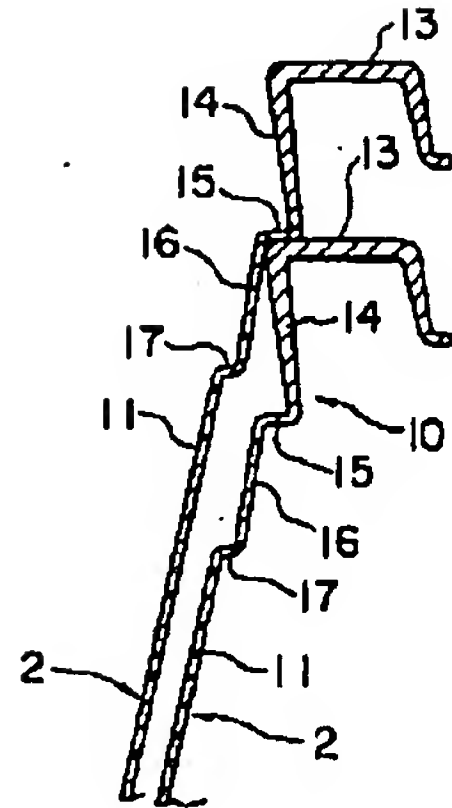
【符号の説明】

- 2 プラスチック製包装容器
- 10 スタック部
- 11 容器胴部
- 12 容器底部
- 13 フランジ部
- 14 スタック下降部
- 15 スタック水平部

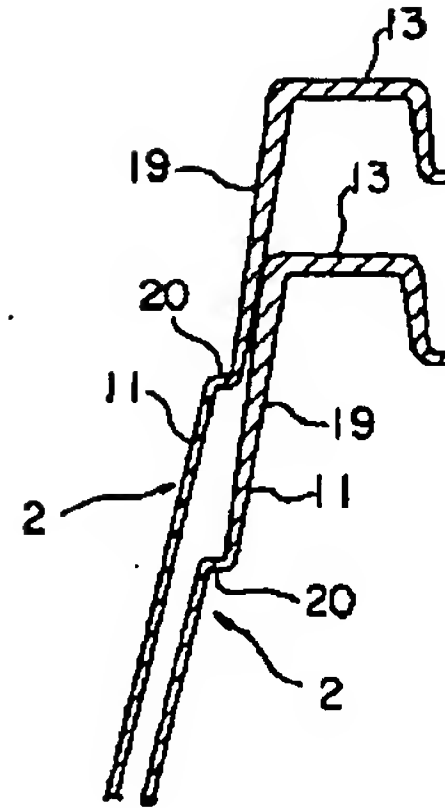
【図1】



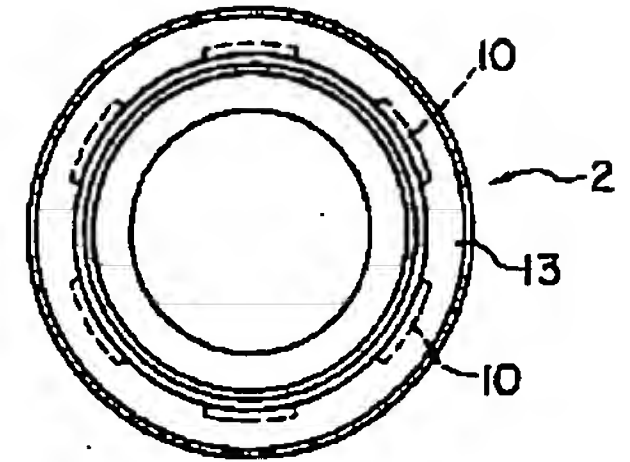
【図2】



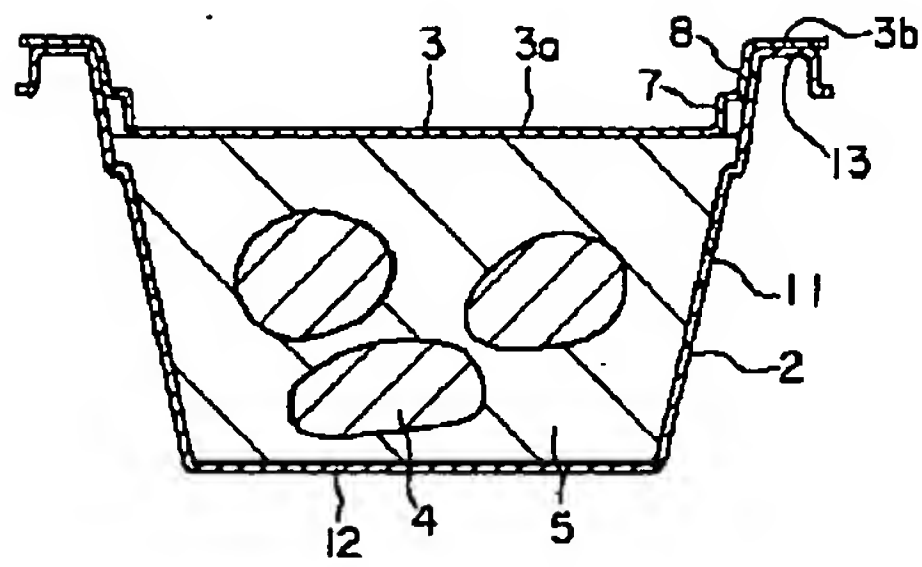
【図3】



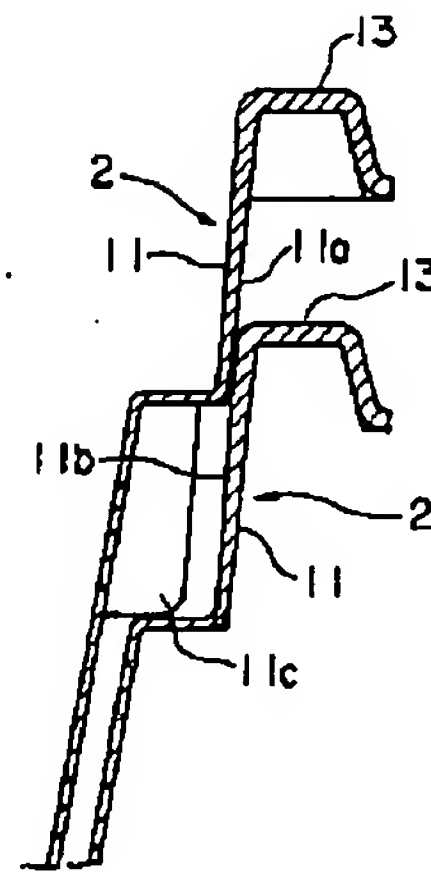
【図5】



【図4】



【図6】



PATENT ABSTRACTS OF JAPAN

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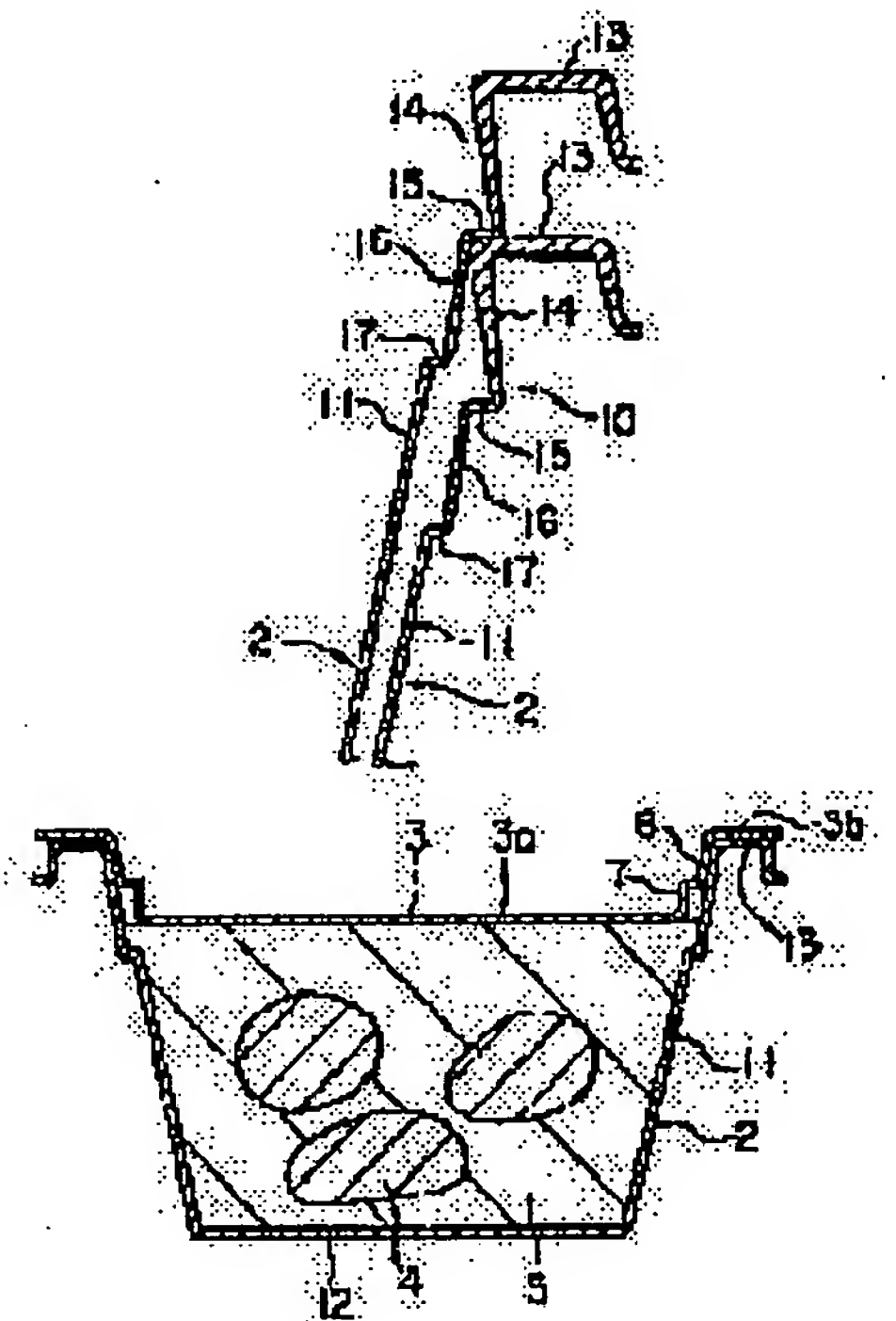
(72)Inventor : YOSOMIYA TAKATOSHI

(54) PACKING CONTAINER

(57)Abstract:

PURPOSE: To provide a plastic container body which can be easily taken out from stacked container main bodies one by one, and does not generate problems at the time of forming.

CONSTITUTION: A container main body 2, which is solid phase pressure-formed, is equipped with a container body part 11, container bottom part 12, and a flange part 13 which provided at the upper end opening peripheral edge of the container body part 11. A plurality of stack parts 10 are provided on the container body part 11 in the peripheral direction, and the stack part 10 is equipped with a stack descending part 14 and stack horizontal part 15.



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CLAIMS

[Claim(s)]

[Claim 1] In the container which is equipped with a container drum section and a container pars basilaris ossis occipitalis, and the flange prepared in the upper limit opening periphery of a container drum section, and comes to carry out thermoforming of the polyolefin resin sheet at low temperature with the melting point The stack downward section to which two or more stack sections are prepared in the hoop direction of said container drum section, and th stack section extends from said flange to the method of the outside of a lower part, The container characterized by th flange of the body of a container caudad located when it has the stack horizontal level prolonged from this stack downward section lower limit to the method of the inside of horizontal and the stack of the body of a container is carried out supporting the stack horizontal level of the body of a container located up.

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DESCRIPTION OF DRAWINGS

[Brief Description of the Drawings]

[Drawing 1] The top view showing one example of the container made from plastics by this invention.

[Drawing 2] The sectional side elevation of the stack section showing the condition of having carried out the stack of two or more containers.

[Drawing 3] The sectional side elevation of container drum sections other than the stack section which shows the condition of having carried out the stack of two or more containers.

[Drawing 4] The sectional side elevation showing the whole lid material which seals a container and this.

[Drawing 5] The top view showing other examples of the container made from plastics.

[Drawing 6] The sectional side elevation showing the condition of having carried out the stack of the conventional container.

[Description of Notations]

2 Container made from Plastics

10 Stack Section

11 Container Drum Section

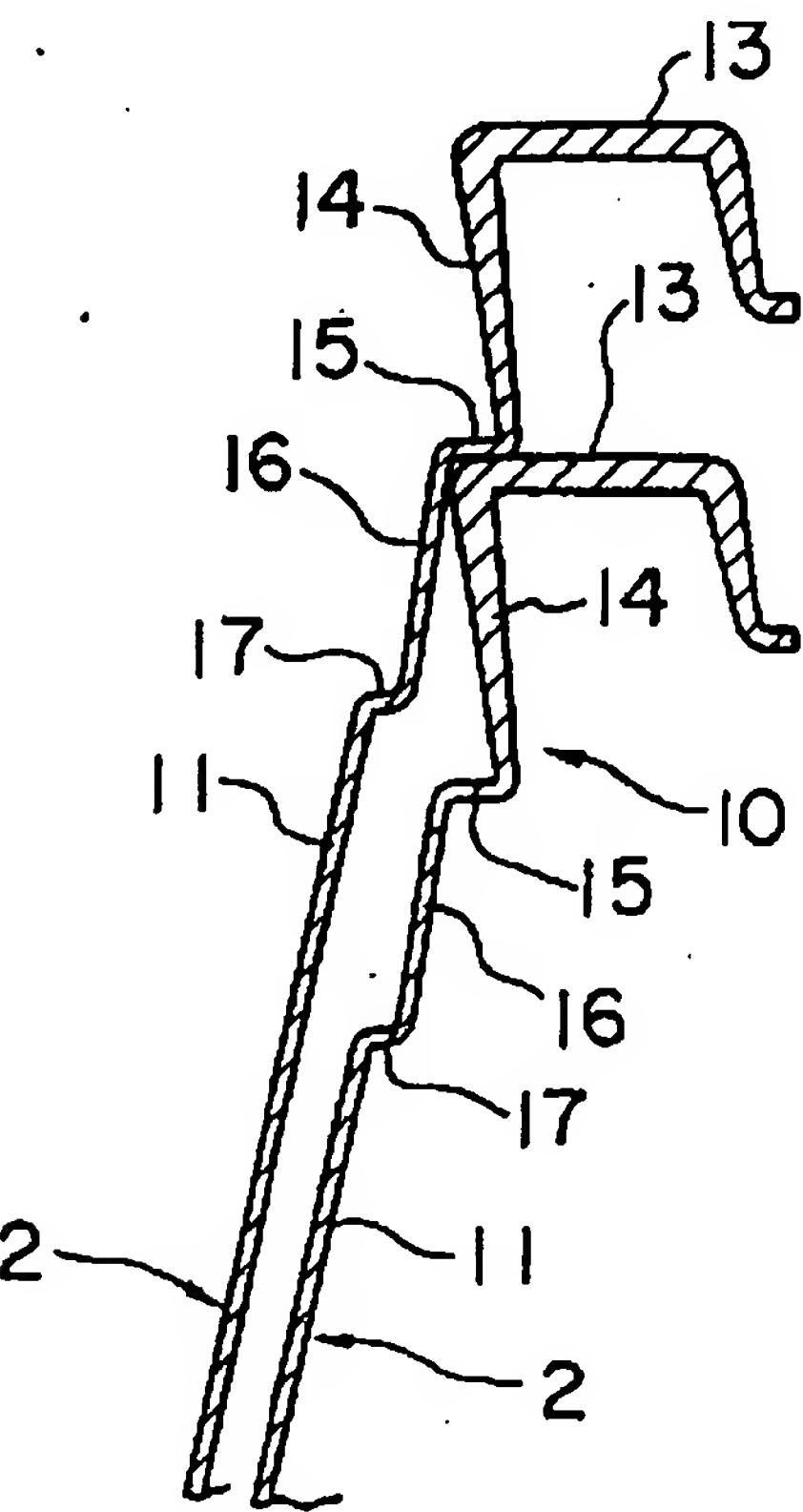
12 Container Pars Basilaris Osis Occipitalis

13 Flange

14 Stack Downward Section

15 Stack Horizontal Level

[Translation done.]



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EXAMPLE

[Example] Hereafter, the example of this invention is explained with reference to a drawing.

[0013] Drawing 1 thru/or drawing 4 are drawings showing one example of the container by this invention. First, drawing 4 explains briefly the container 2 made from plastics, and the whole lid material 3 made from plastics. As shown in drawing 4, it fills up with the fruits 4 and the jelly liquid 5 of a solid in a container 2, and this container 2 is sealed by the lid material 3.

[0014] The container 2 is equipped with the container drum section 11 and the container pars basilaris ossis occipital 12, and the flange 13 prepared in the upper limit opening periphery of the container drum section 11.

[0015] On the other hand, the lid material 3 consists of heat-sealing section 3b heat sealed by the flange 13 of a container 2 (welding is carried out), and dropping covering device 3a prepared inside this heat-sealing section 3b. Dropping covering device 3a is a wrap thing, and heat-sealing section 3b forms the container drum sections 11 successively through the 1st step 7 and the 2nd step 8. Among these, the 2nd step 8 is a part which fits in and is crowded in the inside of a container 2.

[0016] Next, by drawing 1 thru/or drawing 3, a container 2 is explained in full detail below.

[0017] Two or more stack sections 10 are formed in the hoop direction at the container drum section 11 of a container 2. As the stack section 10 is shown in drawing 1, the flat surface is established in eight hoop directions at the container drum section 11 of the square-like container 2. This stack section 10 is a part into which the downward container 2 supports the upper container 2, when two or more containers 2 are accumulated (when a stack is carried out).

[0018] That is, the stack section 10 has the stack downward section 14 prolonged from a flange 13 to the method of the outside of a lower part as shown in drawing 2, and the stack horizontal level 15 prolonged from the lower limit of the stack downward section 14 to the method of the inside of horizontal. Sequential successive formation of the middle downward section 16 further prolonged to the method of the inside of a lower part and the middle horizontal level 17 prolonged from the middle downward section 16 to the method of the inside of horizontal is carried out at the stack horizontal level 15. And when the stack of two or more containers 2 is carried out, the flange 13 of a downward container supports the stack horizontal level 15 of the upper container 2.

[0019] Drawing 3 explains container drum sections 11 other than stack section 10. As shown in drawing 3, the container downward section 19 prolonged from a flange 13 to the method of the inside of a lower part is formed, and the container horizontal level 20 prolonged to the method of the inside of horizontal is formed in the lower limit of the downward section 19. Among these, the container horizontal level 20 is formed in the location corresponding to the middle horizontal level 17 in the same configuration, and has the inclination as the middle downward section 16 with the same container downward section 19.

[0020] Next, the quality of the material of each above-mentioned configuration member is explained.

[0021] A container 2 carries out solid phase pressure forming of the layered product sheet of for example, polypropylene (PP) / (glue line AD) / ethylene-vinylalcohol copolymer (EVOH) / (glue line AD) / polypropylene (PP) at temperature lower than the melting point, is created, and is a transparence container.

[0022] On the other hand, the lid material 3 consists of a layered product of the gas barrier nature of for example, PP/AD/EVOH/AD / sealant layer. This lid material 3 turns a sealant layer to the flange 13 side of a container 2, and heat sealed.

[0023] As explained above, when the stack of two or more containers 2 is carried out according to this example, the stack horizontal level 15 of a container 2 located up can be supported by the flange 13 of the container 2 located caudad. For this reason, since the container drum section 11 of the upper container 2 does not fit in in the container drum section 11 of the downward container 2 when the stack of the container 2 is carried out, each container 2 can be easily picked out from the container 2 by which the stack was carried out. Moreover, in solid phase pressure forming since there are little the stack section and the back taper section as which a moldability is required, a compressed air works effectively and improvement in the moldability of the stack section is found.

[0024] In addition, the burden when taking out from shaping metal mold as compared with the case where the stack

section 10 is formed in the perimeter since the stack section 10 was formed only in the predetermined part among the container drum sections 11, although it was also considered that trouble arises when taking out from shaping epigene mold metal mold, since it has become back taper-like to which the stack downward section 14 of the stack section 10 extends to the method of the outside of a lower part can be pressed down small.

[0025] In addition, although the flat surface showed the example of the square-like container 2 in the above-mention example (drawing 1), as shown in drawing 5 , not only as for this but the container 2, the flat surface may serve as a circle configuration.

[Translation done.]

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TECHNICAL PROBLEM

[Problem(s) to be Solved by the Invention] As mentioned above, in contact with inside 11b of the container drum section 11 of the downward container 2, the stack of the outside 11a of the container drum section 11 of the container of the upper part [containers / 2 / two or more] is carried out. However, in case a container 2 is picked out from this container 2 by which the stack was carried out, there is the approach of those with two kind and one making a back taper the approach of preparing stack section rib 11C (referring to drawing 6), and the stack section at the stack approach of it becoming difficult to take out one by one by friction of container drum section 11 comrade, and usual preparing the stack section, and making it into an undercut configuration.

[0008] By the approach of preparing stack section rib 11C, a container configuration has the problem to which it becomes large, and the poor pinhole by friction may happen, and a stack pitch (container stack spacing) becomes large and carton becomes large at the time of container packing. Although a stack pitch is narrow and carton can set up smoothly by the approach of making the another side stack section an undercut configuration at the time of packing, when a moldability is sweet, it may become container overlap and drawing impossible. A problem is in a moldability at the time of low-temperature shaping especially like [in an undercut configuration] solid phase pressure forming.

[0009] It aims at offering the container made from plastics which this invention is made in consideration of such a point, and can be easily picked out from the container by which the stack was carried out one by one.

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EFFECT OF THE INVENTION

[Effect of the Invention] Since the container drum section of an upper container does not fit in in the container drum section of a downward container according to this invention when even a solid phase pressure-forming article with a difficult moldability carries out the stack of two or more containers as explained above, each container can be picked out from the container by which the stack was carried out in a container. Moreover, since the stack section is prepare only in the predetermined part among container drum sections, even if the stack downward section has become back taper-like, the problem when picking out a container from shaping metal mold as compared with the case where it prepares in the perimeter of a container drum section can be pressed down small.

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PRIOR ART

[Description of the Prior Art] Conventionally, it is filled up with fruits, jelly liquid, etc. in the container made from plastics, and what sealed this container by lid material is known.

[0003] Among these, the container made from plastics has the container pars basilaris ossis occipitalis and the container drum section, and the flange prepared in upper limit opening of this container drum section, and a container carries out thermoforming of the layered product made from plastics, and is created. On the other hand, lid material is heat sealed by the flange of a container.

[0004] That is, lid material consists of the heat-sealing section heat sealed by the flange of a container, and a dropping covering device which falls caudad while being formed successively by this heat-sealing section, and a dropping covering device covers opening of a container.

[0005] The container has the container pars basilaris ossis occipitalis and the container drum section, and the flange mentioned above, before filling up with fruits, jelly liquid, etc., are accumulated and are stored (a stack carried out).

[two or more] The stack condition of a container is shown in drawing 6.

[0006] If the stack of two or more containers 2 is carried out as shown in drawing 6, the upper container 2 will be supported with a downward container in the condition of having made outside 11a of the container drum section 11 contacting inside 11b of the container drum section 11 of the downward container 2.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]

[0001]

[Industrial Application] This invention is a container with which the interior is filled up with food, such as fruits and jelly liquid, and relates to the container which comes to carry out thermoforming of the polyolefin resin sheet in temperature lower than the melting point.

[0002]

[Description of the Prior Art] Conventionally, it is filled up with fruits, jelly liquid, etc. in the container made from plastics, and what sealed this container by lid material is known.

[0003] Among these, the container made from plastics has the container pars basilaris ossis occipitalis and the container drum section, and the flange prepared in upper limit opening of this container drum section, and a container carries out thermoforming of the layered product made from plastics, and is created. On the other hand, lid material is heat sealed by the flange of a container.

[0004] That is, lid material consists of the heat-sealing section heat sealed by the flange of a container, and a dropping covering device which falls caudad while being formed successively by this heat-sealing section, and a dropping covering device covers opening of a container.

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[two or more] The stack condition of a container is shown in drawing 6.

[0006] If the stack of two or more containers 2 is carried out as shown in drawing 6, the upper container 2 will be supported with a downward container in the condition of having made outside 11a of the container drum section 11 contacting inside 11b of the container drum section 11 of the downward container 2.

[0007]

[Problem(s) to be Solved by the Invention] As mentioned above, in contact with inside 11b of the container drum section 11 of the downward container 2, the stack of the outside 11a of the container drum section 11 of the container of the upper part [containers / 2 / two or more] is carried out. However, in case a container 2 is picked out from this container 2 by which the stack was carried out, there is the approach of those with two kind and one making a back taper the approach of preparing stack section rib 11C (referring to drawing 6), and the stack section at the stack approach of it becoming difficult to take out one by one by friction of container drum section 11 comrade, and usual preparing the stack section, and making it into an undercut configuration.

[0008] By the approach of preparing stack section rib 11C, a container configuration has the problem to which it becomes large, and the poor pinhole by friction may happen, and a stack pitch (container stack spacing) becomes large and carton becomes large at the time of container packing. Although a stack pitch is narrow and carton can set up smoothly by the approach of making the another side stack section an undercut configuration at the time of packing, when a moldability is sweet, it may become container overlap and drawing impossible. A problem is in a moldability at the time of low-temperature shaping especially like [in an undercut configuration] solid phase pressure forming.

[0009] It aims at offering the container made from plastics which this invention is made in consideration of such a point, and can be easily picked out from the container by which the stack was carried out one by one.

[0010]

[Means for Solving the Problem] In the container made from plastics which this invention is equipped with a container drum section and a container pars basilaris ossis occipitalis, and the flange prepared in the upper limit opening periphery of a container drum section, and comes to carry out thermoforming of the polyolefin resin sheet at temperature lower than the melting point The stack downward section to which two or more stack sections are prepared in the hoop direction of said container drum section, and this stack section extends from said flange to the method of the outside of a lower part, When it has the stack horizontal level prolonged from this stack downward section lower limit to the method of the inside of horizontal and the stack of the container is carried out, the flange of the container

located caudad is the container characterized by supporting the stack horizontal level of a container located up.

[0011]

[Function] When the stack of two or more containers is carried out, the container stack horizontal level located up can be supported by the flange of the container located caudad.

[0012]

[Example] Hereafter, the example of this invention is explained with reference to a drawing.

[0013] Drawing 1 thru/or drawing 4 are drawings showing one example of the container by this invention. First, drawing 4 explains briefly the container 2 made from plastics, and the whole lid material 3 made from plastics. As shown in drawing 4, it fills up with the fruits 4 and the jelly liquid 5 of a solid in a container 2, and this container 2 is sealed by the lid material 3.

[0014] The container 2 is equipped with the container drum section 11 and the container pars basilaris ossis occipital 12, and the flange 13 prepared in the upper limit opening periphery of the container drum section 11.

[0015] On the other hand, the lid material 3 consists of heat-sealing section 3b heat sealed by the flange 13 of a container 2 (welding is carried out), and dropping covering device 3a prepared inside this heat-sealing section 3b.

Dropping covering device 3a is a wrap thing, and heat-sealing section 3b forms the container drum sections 11 successively through the 1st step 7 and the 2nd step 8. Among these, the 2nd step 8 is a part which fits in and is crowded in the inside of a container 2.

[0016] Next, by drawing 1 thru/or drawing 3, a container 2 is explained in full detail below.

[0017] Two or more stack sections 10 are formed in the hoop direction at the container drum section 11 of a container 2. As the stack section 10 is shown in drawing 1, the flat surface is established in eight hoop directions at the container drum section 11 of the square-like container 2. This stack section 10 is a part into which the downward container 2 supports the upper container 2, when two or more containers 2 are accumulated (when a stack is carried out).

[0018] That is, the stack section 10 has the stack downward section 14 prolonged from a flange 13 to the method of the outside of a lower part as shown in drawing 2, and the stack horizontal level 15 prolonged from the lower limit of the stack downward section 14 to the method of the inside of horizontal. Sequential successive formation of the middle downward section 16 further prolonged to the method of the inside of a lower part and the middle horizontal level 17 prolonged from the middle downward section 16 to the method of the inside of horizontal is carried out at the stack horizontal level 15. And when the stack of two or more containers 2 is carried out, the flange 13 of a downward container supports the stack horizontal level 15 of the upper container 2.

[0019] Drawing 3 explains container drum sections 11 other than stack section 10. As shown in drawing 3, the container downward section 19 prolonged from a flange 13 to the method of the inside of a lower part is formed, and the container horizontal level 20 prolonged to the method of the inside of horizontal is formed in the lower limit of the downward section 19. Among these, the container horizontal level 20 is formed in the location corresponding to the middle horizontal level 17 in the same configuration, and has the inclination as the middle downward section 16 with the same container downward section 19.

[0020] Next, the quality of the material of each above-mentioned configuration member is explained.

[0021] A container 2 carries out solid phase pressure forming of the layered product sheet of for example, polypropylene (PP) / (glue line AD) / ethylene-vinylalcohol copolymer (EVOH) / (glue line AD) / polypropylene (PP) at temperature lower than the melting point, is created, and is a transparency container.

[0022] On the other hand, the lid material 3 consists of a layered product of the gas barrier nature of for example, PP/AD/EVOH/AD / sealant layer. This lid material 3 turns a sealant layer to the flange 13 side of a container 2, and heat sealed.

[0023] As explained above, when the stack of two or more containers 2 is carried out according to this example, the stack horizontal level 15 of a container 2 located up can be supported by the flange 13 of the container 2 located caudad. For this reason, since the container drum section 11 of the upper container 2 does not fit in in the container drum section 11 of the downward container 2 when the stack of the container 2 is carried out, each container 2 can be easily picked out from the container 2 by which the stack was carried out. Moreover, in solid phase pressure forming since there are little the stack section and the back taper section as which a moldability is required, a compressed air works effectively and improvement in the moldability of the stack section is found.

[0024] In addition, the burden when taking out from shaping metal mold as compared with the case where the stack section 10 is formed in the perimeter since the stack section 10 was formed only in the predetermined part among the container drum sections 11, although it was also considered that trouble arises when taking out from shaping epigene mold metal mold, since it has become back taper-like to which the stack downward section 14 of the stack section 10 extends to the method of the outside of a lower part can be pressed down small.

[0025] In addition, although the flat surface showed the example of the square-like container 2 in the above-mentioned example (drawing 1), as shown in drawing 5, not only as for this but the container 2, the flat surface may serve as a circle configuration.

[0026]

[Effect of the Invention] Since the container drum section of an upper container does not fit in in the container drum section of a downward container according to this invention when even a solid phase pressure-forming article with a difficult moldability carries out the stack of two or more containers as explained above, each container can be picked out from the container by which the stack was carried out in a container. Moreover, since the stack section is prepare only in the predetermined part among container drum sections, even if the stack downward section has become back taper-like, the problem when picking out a container from shaping metal mold as compared with the case where it prepares in the perimeter of a container drum section can be pressed down small.

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